

## IN THE CLAIMS

1. (Currently Amended) A method for queuing control of variable bandwidth communications channels comprising:

detecting a change from a first bandwidth to a second bandwidth of a communication channel, the communication channel including a plurality of lines, ~~wherein the change includes one or more lines of the plurality of lines becoming active and one or more lines of the plurality of lines being broken;~~

~~calculating the second bandwidth based upon how many of the plurality of lines are broken;~~

~~adjusting a quality of service controller to compensate for the change from the first bandwidth to the second bandwidth;~~

providing the second bandwidth via a feedback loop to a transmission rate selector;  
and

~~— computing transmission rates;~~

~~— queuing first data cells of having fixed transmission rates;~~

~~— assigning a high transmission priority to the first data cells;~~

~~— queuing second data cells having variable transmission rates; and~~

~~— assigning a lower priority to the second data cells.~~

selecting a first and a second queued cells for transmission based upon an associated transmission priority, wherein the first queued cells have a higher transmission priority than the second queued cells.

2. (Canceled)

3. (Previously Presented) The method of claim 1, further comprising maintaining quality of service.

4. (Canceled)

5. (Previously Presented) The method of claim 1, wherein a cell selector selects first and second queued cells for transmission based upon their associated priority.

6. (Currently Amended) An apparatus comprising:

means for detecting a change from a first bandwidth to a second bandwidth of a communication channel, the communication channel including a plurality of lines, ~~wherein the change includes one or more lines of the plurality of lines becoming active and one or more lines of the plurality of lines being broken;~~

~~means for calculating the second bandwidth based upon how many of the plurality of lines are broken; and~~

~~means for selecting a first and a second queued cells for transmission using the second bandwidth based upon an associated transmission priority, wherein the first queued cells have a higher transmission priority than the second queued cells adjusting a quality of service controller to compensate for the change from the first bandwidth to the second bandwidth.~~

7. (Currently Amended) The apparatus of claim 22 [[6]], wherein the means for adjusting the quality of service controller further comprises:

means for providing the second bandwidth via a feed back loop to a transmission rate selector; and

means for computing transmission rates.

8. (Previously presented) The apparatus of claim 7, further comprising:

means for maintaining quality of service.

9. (Original) The apparatus of claim 7 further comprising:

means for queuing first data cells of having fixed transmission rates;

means for assigning a high transmission priority to the first data cells;

means for queuing second data cells having variable transmission rates; and

means for assigning a lower priority to the second data cells.

10. (Original) The apparatus of claim 9, wherein a cell selector selects first and second queued cells for transmission based upon their associated priority.

11. (Currently Amended) A computer-readable medium having stored thereon a plurality of instructions, said plurality of instructions when executed by a computer, cause said computer to perform the method of:

detecting a change from a first bandwidth to a second bandwidth of a communication channel, the communication channel including a plurality of lines, ~~wherein the change includes one or more lines of the plurality of lines becoming active and one or more lines of the plurality of lines being broken;~~

~~calculating the second bandwidth based upon how many of the plurality of lines are broken; and~~

selecting a first and a second queued cells for transmission based upon an associated transmission priority, wherein the first queued cells have a higher transmission priority than the second queued cells, wherein the first queued cells have a higher transmission priority than the second queued cells adjusting a quality of service controller to compensate for the change from the first bandwidth to the second bandwidth.

12. (Previously Presented) The computer-readable medium of claim 11 having stored thereon additional instructions, said plurality of instructions when executed by a computer, cause said computer to further perform the method of:

providing the second bandwidth via a feed back loop to a transmission rate selector;

and

computing transmission rates.

13. (Original) The computer-readable medium of claim 12 having stored thereon additional instructions, said plurality of instructions when executed by a computer, cause said computer to further perform the method of maintaining quality of service.

14. (Original) The computer-readable medium of claim 12 having stored thereon additional instructions, said plurality of instructions when executed by a computer, cause said computer to further perform the method of:

queuing first data cells of having fixed transmission rates;

assigning a high transmission priority to the first data cells;

queuing second data cells having variable transmission rates; and

assigning a lower priority to the second data cells.

15. (Original) The computer-readable medium of claim 14 having stored thereon additional instructions, said plurality of instructions when executed by a computer, cause said computer to further perform the method of selecting first and second queued cells for transmission based upon their associated priority by the cell selector.

16 - 17. (Canceled)

18. (New) The method of claim 1, wherein adjusting the quality of service controller further comprises:

calculating the second bandwidth;  
providing the second bandwidth via a feedback loop to a transmission rate selector;  
and  
computing transmission rates.

19. (New) The method of claim 18, further comprising:

queuing first data cells of having fixed transmission rates;  
assigning a high transmission priority to the first data cells;  
queuing second data cells having variable transmission rates; and  
assigning a lower priority to the second data cells.

20. (New) The method of claim 1, further comprising:

adjusting a quality of service controller to compensate for the change from the first bandwidth to the second bandwidth.

21. (New) The method of claim 1, wherein the change includes one or more lines of the plurality of lines becoming active and one or more lines of the plurality of lines being broken.

22. (New) The apparatus of claim 6, further comprising:

means for adjusting a quality of service controller to compensate for the change from the first bandwidth to the second bandwidth.

23. (New) The apparatus of claim 6, wherein the means for calculating the second bandwidth based upon how many of the plurality of lines are broken.

24. (New) The computer readable medium of claim 11, wherein the change includes one or more lines of the plurality of lines becoming active and one or more lines of the plurality of

lines being broken.